

### **REMARKS/ARGUMENTS**

Claims 1 and 3-16 are currently pending and stand rejected by the Examiner. The above amendments added the limitation of claim 7 to claim 5, making claims 6 and 7 duplicative so they were canceled. The deleting of claim 7 then necessitated other minor amendments in the claims which previously depended from claim 7. No new matter is being added by these amendments. Accordingly the entry of these amendments appears proper and is courteously solicited.

#### **35 USC § 103 rejections based on US 4,461,873 to Bailey et al.**

Claims 1, 3, 4, and 16 were then rejected by the Examiner under 35 USC § 103 as being unpatentable over US 4,461,873 to Bailey et al. Claim 16 no longer depends from Claim 1, and so it is believed that this rejection no longer applies to claim 16. It is assumed that this rejection was mistakenly carried over from the previous office action.

Claim 1 in the present application is a film having a layer made from a polymer composition that has at least two components. Component A is a high molecular weight component that is required to be a homogeneously branched component. This branching is indicated by an Mw/Mn value of from 1.5 to 3, which is also a recitation in claim 1. The Examiner has indicated that Bailey recites a polymer having the recited Mw/Mn as it states in Table 1 that the high molecular weight component should have an Mw/Mn of "<10".

The Examiner maintains the position that a disclosure of a Mw/Mn of "less than 10" includes all values down to zero, and for that matter, even negative values. While this may be mathematically true, it should be considered in the context of what such a disclosure would mean to a person of ordinary skill in the art. In polyethylene art it is readily understood that there is a fundamental difference between heterogeneously branched polyethylene such as those prepared by traditional Ziegler-Natta catalysts, and homogeneously branched polyethylene such as those prepared by constrained geometry catalysts. It is respectfully submitted that a person skilled in this art would recognize the broad teaching of "less than 10" to identify that Bailey was speaking of heterogeneously branched polymers. This interpretation is supported

by the preferred range of 4-9, the identification of the preferred catalysts, and the examples.

As an analogy, consider a statement that “bath water for infants should be kept at a temperature less than 100°F”. A person reading that statement would recognize that the bath water should be heated, and thus this statement would not be understood by a person of ordinary skill in the art of parenting as teaching keeping the bath water at 40°F, even though mathematically, it would be true. Just as “bath water” to the parent implies heating, resin with an “ $M_w/M_n < 10$ ” identifies the resin to a person of skill in the polyethylene art as being heterogeneously branched.

Moreover, for the sake of argument, assuming that Bailey’s statement did teach polymers with an  $M_w/M_n$  of 1.5 to 3, it is clear that Bailey did not teach any advantage for selecting such a range. Thus, at a minimum, patentability should be awarded if unexpected results can be shown that the portion of the overall range taught by Bailey, which is now being claimed by the applicants, offers an unexpected advantage. To this point, the Examiner is directed to the attached affidavit of one of the inventors, Mridula Kapur. In that affidavit, comparative data is shown demonstrating that using a homogeneously branched high molecular weight component results in a film having significantly better water vapor transmission rate.

As claims 3 and 4 depend from Claim 1, they too require the high molecular weight component to be a homogeneously branched component, an element which is not taught by Bailey. Thus, it is respectfully requested that each of the rejections under 35 USC § 103 (a) based on Bailey et al be withdrawn.

35 USC § 103 rejections based on US 4,536,550 to Moriguchi et al.

Next, the Examiner has rejected claims 5-16 under 35 USC § 103 as being unpatentable over US 4,536,550 to Moriguchi et al. The Examiner first pointed out that not all of the previous claims required both the very high molecular weight fraction and the very low molecular weight fraction, and thus the results shown were not commensurate in scope to the claims. The above amendments have rectified this problem.

Secondly, the Examiner stated that “neither the specification text . . . nor Table 1 . . . discloses the amount of said fractions in any of Example 1 and Comparative Examples 1 and 2”. The Examiner is directed to Figures 1 and 2 for this information.

Applicants acknowledge that a statement in the Example section directing the reader to the figures would have helped clarity, and apologize for this oversight. With this explanation, however, the advantages of the ethylene composition as recited in claim 5 can be seen. As such advantages are not suggested by Moriguchi, it is respectfully submitted that claims 5, and 8-16 are patentable over the art of record.

Accordingly, as the art of record does not teach or suggest the invention as recited in any of the pending claims, a notice of allowance of claims 1, 3-5, and 8-16 is courteously requested.

Respectfully submitted,

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